

We Claim:

1. In a method for removing an oxidizable liquid and related liquid vapor from a storage tank having a closed interior defined by at least one upstanding wall having an exterior side and an interior side, a bottom, and an open top opposing said bottom, said open top being fitted with a floatable roof that is slidingly sealed to said interior side to keep said vapor from escaping to the ambient atmosphere outside said tank interior, said roof carrying a plurality of support legs that extend essentially equidistantly into said tank interior which legs stop said roof and hold it stationery a finite distance apart from said bottom thereby leaving liquid and related vapor remaining between said stationery floating roof and said bottom, said floating roof carrying at least two vents which are in fluid communication between said tank interior that remains under said stationery floating roof and said ambient atmosphere, the improvement comprising a method of removing essentially all said remaining liquid from said tank interior under said stationery roof without creating a vacuum within said interior while removing said related vapor from said interior with minimal emissions to said ambient atmosphere comprising the steps of removing from said interior said remaining liquid, removing from said interior said vapor through at least one of said vents, said vapor removal being effected in a contained manner, transporting said contained vapor to at least one thermal oxidizer, oxidizing said contained vapor to a substantial extent in said at least one oxidizer, emitting to said ambient atmosphere the exhaust of said at least one oxidizer, introducing through at least one other of said vents at least one inert gas in an amount sufficient to maintain a gaseous pressure between said stationery roof and said liquid in said tank sufficient to prevent the formation of a vacuum in said tank interior as said liquid is removed there from while said floating roof remains stationery, whereby

said tank is emptied of essentially all its liquid content without appreciable loss of related vapor to said ambient atmosphere, and without damage to said tank.

2. The method of claim 1 wherein said liquid removal, said vapor removal, and said inert gas introduction are carried out essentially contemporaneously.
3. The method of claim 1 wherein the pressure in said interior of said tank is measured during said liquid and vapor removal steps after said roof has become stationery, and at least one of said vents is opened to said ambient atmosphere if a predetermined over pressure or vacuum level is reached in said interior during said removal steps.
4. The method of claim 1 wherein said liquid is hydro carbonaceous.
5. The method of claim 4 wherein said liquid contains hydrocarbon molecules having up to 12 carbon atoms per molecule.
6. The method of claim 1 wherein said liquid is gasoline.
7. The method of claim 1 wherein said vapor is oxidized in said at least one oxidizer to an extent of at least about 95%.
8. The method of claim 4 wherein said vapor is combusted essentially to water vapor and carbon dioxide.
9. The method of claim 1 wherein said tank walls and roof are curvilinear in configuration.
10. The method of claim 1 wherein said roof becomes stationery at a distance of at least about 7 feet from said bottom.